

UdaPeople CI/CD Product Development Project

Create, Integrate and Deploy

Elshad Rzayev 12 December 2021

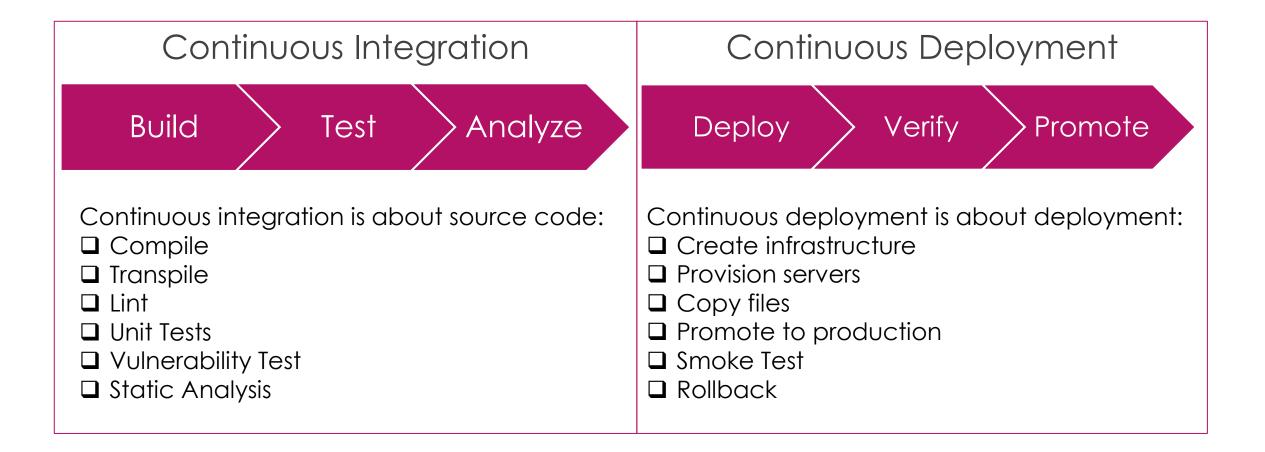
Agenda

- Introduction to CI/CD
- ► CI/CD Workflows
- ▶ Benefits of CI/CD

Introduction

- Continuous Integration is the practice of merging all developers working copies to a shared main line several times a day.
- ► Continuous Delivery is an engineering paradigm in which teams produce and release value in short cycles.
- ► Continuous Deployment is software engineering approach in which value is delivered frequently through automated deployments.

CI/CD Workflows



Benefits of CI/CD

Continuous Integration

- Catch compile errors:
 - Reduce cost through developer time on fixing issues
- Catch unit test failures:
 - Avoid cost through less bugs in production
- Detect security vulnerabilities:
 - Avoid cost through preventing costly security holes

Continuous Deployment

- Automate infrastructure creation:
 - Avoid cost due to less human errors
- Frequent production deployments:
 - Increase revenue through faster features deployment
- Automated smoke test:
 - Protect revenue through reduced downtime
- Automated rollback:
 - Protect revenue due to quick undo process